

## **Amendments to the Claims**

### **Claims 1-11 (Cancelled)**

12. (Previously Presented) A method for managing a broadband modem, comprising:  
transmitting a discovery signal over a connection;  
entering a connect state in response to receiving a discovery acknowledge signal;  
recording a media access control (MAC) address corresponding to the broadband  
modem, the broadband modem to transmit the discovery acknowledge  
signal in response to the discovery signal; and  
transmitting a terminate message to other broadband modems connected to the  
connection.
13. (Previously Presented) The method of claim 12, further comprising specifying  
data formats supported in the discovery signal.
14. (Previously Presented) The method of claim 12, further comprising recording a  
data format selected by the broadband modem in the discovery acknowledge  
signal.
15. (Currently Amended) The method of claim 12, further comprising:  
sending a poll message to the broadband modem; and  
entering a disconnect state if a poll acknowledge message is not received in  
response to the poll message within a predefined period of time.
16. (Previously Presented) The method of claim 12, further comprising transmitting a  
sleep message to the broadband modem indicating that its binding client system is  
about to enter into a sleep state.

17. (Currently Amended) A method for managing a broadband modem, comprising:  
transmitting a discovery acknowledge signal over a transmission medium in  
response to receiving a discovery signal from a first client computer  
system;  
forwarding asynchronous transfer mode (ATM) ATM-cells between the first  
client computer system and an asymmetrical digital subscriber line  
(ADSL)~~ADSL~~;  
generating and verifying a header error control (HEC) field in the ATM cells-cell;  
entering a sleep state and disabling an activity timer upon receiving a sleep  
message from the first client computer system;  
entering a connect state upon receiving a wake-up event from a second client  
computer system; and  
entering a disconnect state if ~~the a~~ poll message is not received from the first  
client computer system within ~~the a~~ predetermined period of time.
18. (Previously Presented) The method of claim 17, further comprising specifying a  
data format supported by the broadband modem among data formats specified in  
the discovery signal.
19. (Currently Amended) The method of claim 17, further comprising:  
transmitting a poll acknowledge message in response to receiving the poll  
message; and  
entering the disconnect state if the poll message is not received within ~~a~~the  
predetermined period of time.

Claims 20-23 (Cancelled)

24. (Currently Amended) A machine-readable medium having stored thereon data including sets of instructions which, when executed by a machine, cause the machine to:
- transmit a discovery signal over a connection;
- enter a connect state in response to receiving a discovery acknowledge signal;
- record a media access control (MAC) ~~MAC~~ address corresponding to ~~the a~~ broadband modem, the broadband modem to transmit the discovery acknowledge signal in response to the discovery signal; and
- transmit a terminate message to other broadband modems connected to the connection.
25. (Previously Presented) The machine-readable medium of claim 24, wherein the sets of instructions which, when executed by the machine, further cause the machine to specify data formats supported in the discovery signal.
26. (Previously Presented) The machine-readable medium of claim 24, wherein the sets of instructions which, when executed by the machine, further cause the machine to record a data format selected by the broadband modem in the discovery acknowledge signal.
27. (Original) The machine-readable medium of claim 24, wherein the sets of instructions which, when executed by the machine, further cause the machine to:
- send a poll message to the broadband modem; and
- enter a disconnect state if a poll acknowledge message is not received in response to the poll message within a predefined period of time.

Claims 28-29 (Cancelled)

30. (Currently Amended) A method for establishing an asynchronous transfer mode (ATM) ~~ATM~~-signal for transmitting an ATM cell from a first computer system to a second computer system, comprising:
- transmitting the ATM cell from the first computer system to a given one of a plurality of broadband modems, the plurality of broadband modems configured to operate as peripherals;
- transmitting a discovery signal from the second computer system to the plurality of broadband modems;
- the given one of the plurality of broadband modems transmitting a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband modems; and
- the second computer system entering into a connect state with the given one of the plurality of broadband modems to accept the ATM cell from the given broadband modem.
31. (Previously Presented) The method of claim 30, further comprising specifying data formats supported in the discovery signal.
32. (Currently Amended) A machine-readable medium having stored thereon data including sets of instructions which, when executed by a machine, cause the machine to:
- transmit a discovery signal over a connection;
- transmit an asynchronous transfer mode (ATM) ~~the ATM~~-cell from a first computer system to a given one of a plurality of broadband modems, the plurality of broadband modems configured to operate as peripherals; and

transmit a discovery signal from a second computer system to the plurality of  
broadband modems;  
the given one of the plurality of broadband modems transmit a discovery  
acknowledge signal to the second computer system in response to the  
discovery signal to establish a binding between the second computer  
system and the given one of the plurality of broadband modems; ~~and~~  
the second computer system enter into a connect state with the given one of the  
plurality of broadband modems to accept the ATM cell from the given  
broadband modem.

33. (Previously Presented) The machine-readable medium of claim 32, wherein the  
sets of instructions which, when executed by the machine, further cause the  
machine to specify data formats supported in the discovery signal.
34. (Previously Presented) The machine-readable medium of claim 32, wherein the  
sets of instructions which, when executed by the machine, further cause the  
machine to record a data format selected by the given one of the plurality of  
broadband modems in the discovery acknowledge signal.
35. (Previously Presented) The method of claim 30, further comprising recording a  
data format selected by the given one of the plurality of broadband modems in the  
discovery acknowledge signal.
36. (Currently Amended) A system for establishing an asynchronous transfer mode  
(ATM) ATM-signal for transmitting an ATM cell from a first computer system to  
a second computer system, comprising:  
the first computer system to transmit the ATM cell to a given one of a plurality of  
broadband modems, the plurality of broadband modems configured to  
operate as peripherals;

the second computer system coupled to the first computer system, the second computer system to transmit a discovery signal to the plurality of broadband modems;

the given one of the plurality of broadband modems to transmit a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband modems; and

the second computer system to enter into a connect state with the given one of the plurality of broadband modems to accept the ATM cell from the given broadband modem.

37. (Previously Presented) The system of claim 36, wherein data formats supported in the discovery signal are specified.

38. (Previously Presented) The system of claim 36, wherein a data format selected by the broadband modem in the discovery acknowledge signal is recorded.

39. (Currently Amended) A system for managing a broadband modem, comprising:  
the broadband modem to

transmit a discovery acknowledge signal over a transmission medium in response to receiving a discovery signal from a first client computer system;

forward asynchronous transfer mode (ATM) ~~ATM~~-cells between the first client computer system and an asymmetrical digital subscriber line (ADSL)~~ADSL~~;

generate and verifying a header error control (HEC) field in the ATM cell~~cell~~;

enter a sleep state and ~~disable~~ disabling an activity timer upon receiving a sleep message from the first client computer system;  
enter a connect state upon receiving a wake-up event from a second client computer system; and  
enter a disconnect state if ~~the~~ a poll message is not received from the first client computer system within ~~the~~ a predetermined period of time.

40. (Previously Presented) The system of claim 39, wherein data formats supported in the discovery signal are specified.
41. (Previously Presented) The system of claim 39, wherein a data format selected by the broadband modem in the discovery acknowledge signal is recorded.